

## **SUBCHAPTER X : WASTE PROCESSES AND REMEDIATION**

### **§106.531. Sewage Treatment Facility (Previously SE 60).**

Sewage treatment facilities, excluding combustion or incineration equipment, land farms, or grease trap waste handling or treatment facilities are exempt.

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### **§106.532. Water and Wastewater Treatment (Previously SE 61).**

Water and wastewater treatment units are exempt, provided the following conditions of this section are met.

(1) The facility performs only the following functions:

- (A) disinfection;
- (B) softening;
- (C) filtration;
- (D) flocculation;
- (E) stabilization;
- (F) taste and odor control;
- (G) clarification;
- (H) carbonation;
- (I) sedimentation;
- (J) neutralization;
- (K) chlorine removal;

(L) activated sludge treatment, anaerobic treatment, and associated control of gases from these treatments;

(M) aerobic oxidation/biodegradation using oxygen or peroxide in the absence of nitrogen or other gas that would cause stripping of volatile organic compounds (VOC) from the water;

(N) stripping VOC, ammonia, or other air contaminants from the water with air or other gas, provided the stripped gases are controlled with an abatement system that meets the requirements of §106.533(5) of this title (relating to Water and Soil Remediation (Previously SE 68(e))). For ammonia or hydrogen chloride (HCl) or other acid gas emissions, abatement may include a water or caustic scrubbing system as a means of complying with this section. Final emissions of HCl resulting from combustion of chlorine or chlorine-containing compounds shall not exceed 0.1 pounds per hour;

(O) liquid phase separation of VOC and water in which:

(i) the sum of the partial pressures of all species of VOC in any sample is less than 1.5 psia; or

(ii) the separator is enclosed and emissions are vented through an emission abatement system meeting the requirements specified previously for stripped VOC and ammonia;

(2) Chlorine or sulfur dioxide (SO<sub>2</sub>) shall be used only in containers approved by the United States Department of Transportation and emissions of chlorine or SO<sub>2</sub> from treatment of water or decontamination of equipment at any water treatment plant shall not exceed ten tons per year.

(3) The following shall not be exempted by this section:

(A) gas stripping or aeration facilities where VOC or other air contaminants are stripped from water directly to the atmosphere;

(B) disposal facilities using land surface treatment;

(C) surface facilities associated with injection wells;

(D) cooling towers in which VOC or other air contaminants may be stripped to the atmosphere.

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**§106.533. Water and Soil Remediation (Previously SE 68).**

Equipment used to reclaim or destroy chemicals removed from contaminated ground water, contaminated water condensate in tank and pipeline systems, or contaminated soil for the purpose of remedial action is exempt, provided all the following conditions of this section are satisfied.

(1) Applicability shall pertain to soil and water remediation at the property where the original contamination of the ground water or soil occurred or at a nearby property secondarily affected by the contamination, but not to any soil or water treatment facility where soils or water are brought in from another property. Such facilities are subject to §116.110 of this title (relating to Applicability).

(2) For treating groundwater or soil contaminated with petroleum compounds, the total emissions of petroleum hydrocarbons shall not exceed 1.0 pound per hour (lb/hr), except that benzene emissions also must meet the conditions of §106.262(3) and (4) of this title (relating to Facilities (Emission and Distance Limitations) (Previously SE 118)). For purposes of this section, petroleum is considered to include:

(A) liquids or gases produced from natural formations of crude oil, tar sands, shale, coal and natural gas; or

(B) refinery fuel products to include fuel additives.

(3) For treating groundwater or soil contaminated with chemicals other than petroleum, emissions must meet the requirements of §106.262(2), (3), and (4) of this title. If the groundwater or soil is contaminated with both petroleum and other chemicals, the petroleum compound emissions must meet paragraph (2) of this section and the other chemical emissions must meet the requirements of §106.262(2), (3), and (4) of this title. The emission of any chemical not having a Limit (L) Value in Table 262 of §106.262 of this title is limited to 1.0 lb/hr.

(4) The handling and processing (screening, crushing, etc.) of contaminated soil and the handling and conditioning (adding moisture) of remediated soil shall be controlled such that there are no visible emissions with the exception of moisture.

(5) If abatement equipment is used to meet paragraphs (2) and (3) of this section, the equipment must satisfy one of the following conditions.

(A) The vapors shall be burned in a direct-flame combustion device (incinerator, furnace, boiler, heater, or other enclosed direct-flame device) operated in compliance with §106.493(2) and (3) of this title (relating to Direct Flame Incinerators (Previously SE 88)).

(B) The vapors shall be burned in a flare which meets the requirements of §106.492 of this title (relating to Flares (Previously SE 80)) and the requirements of 40 Code of Federal Regulations 60.18, which shall take precedence over §106.492 of this title in any conflicting requirements whether or not New Source Performance Standards apply to the flare.

(C) The vapors shall be burned in a catalytic oxidizer which destroys at least 90% of the vapors. An evaluation of oxidizer effectiveness shall be made at least weekly, using a portable flame or photoionization detector or equivalent instrument to determine the quantity of carbon compounds in the inlet and outlet of the catalytic oxidizer. Records of oxidizer performance shall be maintained in accordance with paragraph (7) of this section.

(D) The vapors shall be routed through a carbon adsorption system (CAS) consisting of at least two activated carbon canisters that are connected in series. The system shall meet the following additional requirements.

(i) The CAS shall be sampled and recorded weekly to determine breakthrough of volatile organic compounds (VOC). Breakthrough is defined as a measured VOC concentration of 50 parts per million by volume (ppmv) in the outlet of the initial canister. The sampling point shall be at the outlet of the initial canister, but before the inlet to the second or final polishing canister. Sampling shall be performed while venting maximum emissions to the CAS (example: during loading of tank trucks, during tank filling, during process venting).

(ii) A flame ionization detector (FID) shall be used for VOC sampling. The FID shall be calibrated prior to sampling with certified gas mixtures (propane in air) of  $10 \text{ ppmv} \pm 2.0\%$  and of  $100 \text{ ppmv} \pm 2.0\%$ .

(iii) When the VOC breakthrough is measured, the waste gas flow shall be switched to the second canister immediately. Within four hours of detection of breakthrough, a fresh canister shall be placed as the new final polishing canister. Sufficient fresh activated carbon canisters shall be maintained at the site to ensure fresh polishing canisters are installed within four hours of detection of breakthrough.

(iv) Records of the CAS monitoring maintained at the plant site shall include, but are not limited to, the following:

- (I) sample time and date;
- (II) monitoring results (ppmv);
- (III) corrective action taken, including the time and date of the action; and
- (IV) process operations occurring at the time of sampling.

(v) The registration shall include a demonstration that activated carbon is an appropriate choice for control of the organic compounds to be stripped.

(6) Before construction of the facility begins, the facility shall be registered with the commission's Office of Air Quality in Austin using Form PI-7. The registration shall contain specific information concerning the basis (measured or calculated) for the expected emissions from the facility. The registration shall also explain details as to why the emission control system can be expected to perform as represented.

(7) Records required by applicable paragraphs of this section shall be maintained at the site and made available to personnel from the commission or any local agency having jurisdiction. These records shall be made available to representatives of the commission and local programs upon request and shall be retained for at least two years following the date that the data is obtained.

**§106.534. Municipal Solid Waste Landfills and Transfer Stations (Previously SE 110).**

Municipal solid waste landfills and waste transfer stations operating in compliance with the Texas Solid Waste Disposal Act are exempt.

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